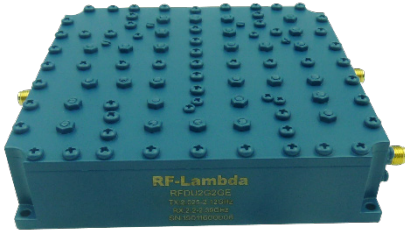


Coaxial Cavity Dual Frequency Combiner 703MHz-803MHz



Note: The photo is for illustration purposes only.
Please refer to the outline drawing.

Features

- Cavity Combiner
- High Isolation
- Low Insertion Loss
- Excellent Temperature Stability

Product Description

RFDULTE0037 is a coaxial cavity dual frequency combiner with a frequency range of 703 to 803MHz.

The power rating is 100W. The insertion loss is 1.5dB with a minimum rejection of 80dB.

The working temperature of this product is between - 20°C and + 60°C.

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

Electrical Specifications, TA = +25°C

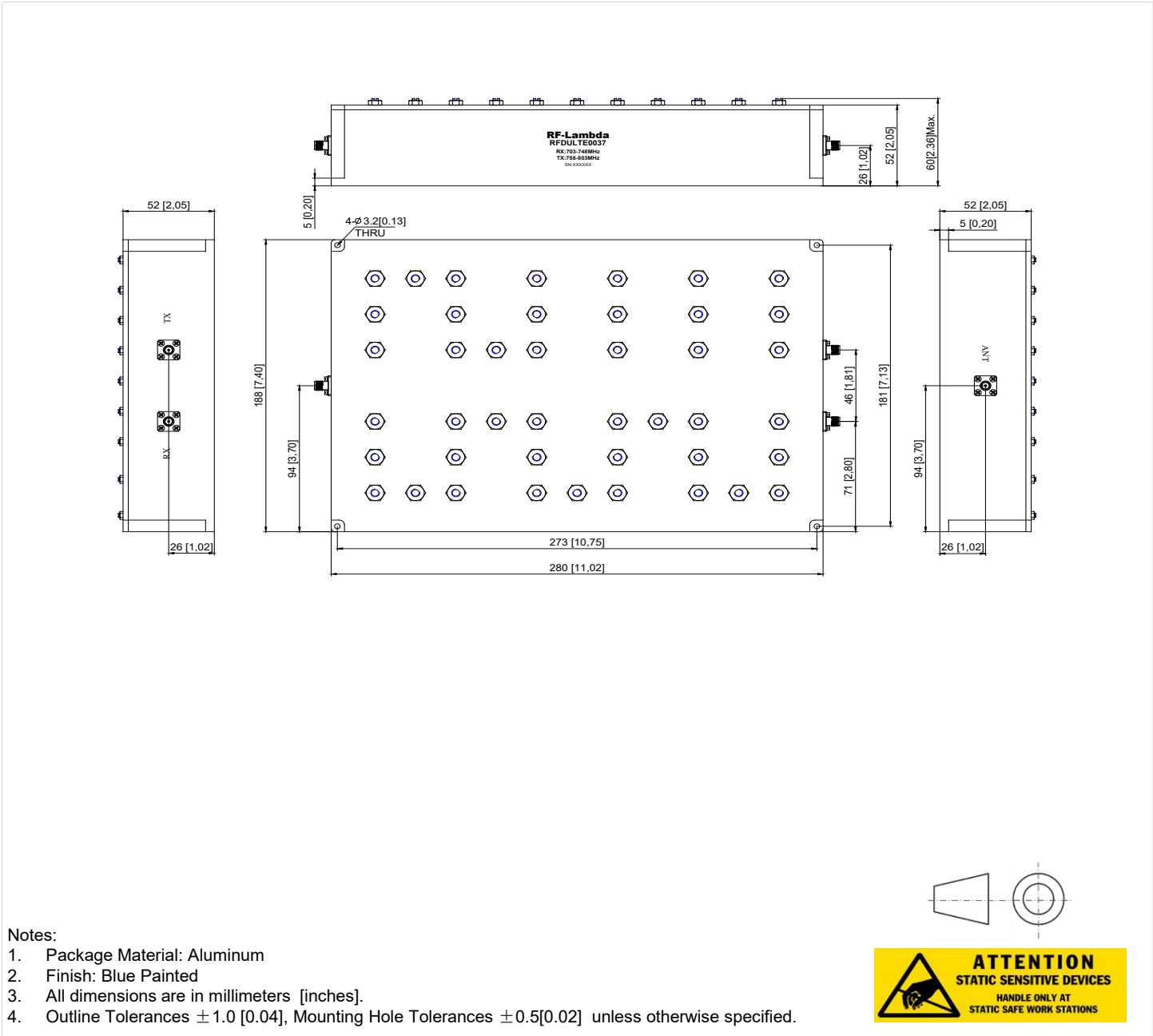
Parameter	RX			TX			Units	
	Min	Typ	Max	Min	Typ	Max		
Frequency Range	703 - 748			758 - 803			MHz	
Insertion Loss	1.5			1.5			dB	
Pass Band Ripple	1.2			1.2			dB	
VSWR	1.25			1.25			: 1	
Rejection	@758-803MHz	80						dB
	@703-748MHz	80					dB	
Power(CW)	100						W	
Weight				-			lbs	
Impedance	50						Ω	
Input / Output Connectors	SMA-Female(Input) – SMA-Female(Output)							
Package	Epoxy Sealed (Standard)							
	Hermetically Sealed (Optional)							

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20°C to +60°C (Case Temperature)
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

**For vibration testing details please see additional information section.

Outline Drawing



Additional Information

Documentation	Webpage
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RFDULTE0037	Input connector SMA-Female and Output connector SMA-Female	703-803MHz Coaxial Cavity Dual Frequency Combiner

Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information.

RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.